

ABSTRACT

An axial swaging tool including a housing defining a chamber, a piston rod held statically in the chamber, a piston conformingly receiving and slidable along the piston rod, a ram conformingly receiving and slidable on a first end of the piston rod, a first engagement member statically positioned on the housing, a second engagement member positioned on the piston, and a spring adjoining the piston and an end of the piston rod. The spring is configured to bias the piston away from a second end of the piston rod, such that the second engagement member is biased away from the first engagement member, the piston rod is biased against a first end of the housing, and piston is biased against the ram, which in turn is biased against a second end of the housing. The ram is made of a bearing material, and carries a seal such that it forms a hydraulically sealed chamber within the chamber at the second end of the housing, the hydraulically sealed chamber to be used with a source of pressurized hydraulic fluid for hydraulically driving the ram and piston toward the first end of the housing, compressing the spring and forcing the second engagement member toward the first engagement member.